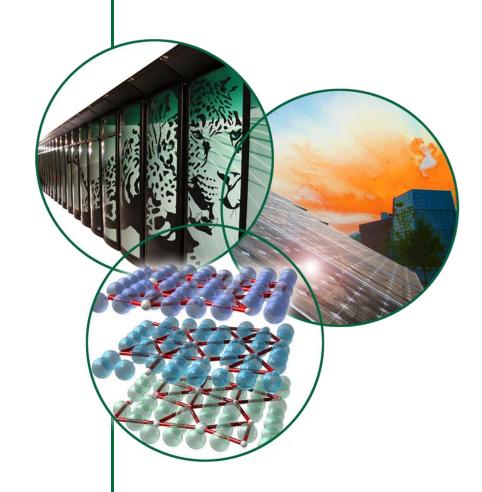
Integrating Environmental, Safety, and Quality Management System Audits

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David Skipper - Bio

- Graduate of The University of Tennessee with a Masters **Degree in Environmental Engineering**
- Worked at ORNL since 1990
- Served as UT-Battelle Environmental Protection Services Manager since 2000
- Worked in waste and air compliance at ORNL for 10+ years prior to current job
- Responsible for developing, implementing, and improving the ORNL ISO 14001-registered environmental management system



UT-Battelle Management System Philosophy

External registration/validation of management systems is desirable:

- Demonstrates ESHQ leadership
- Important to customers
- Can result in reduction in oversight and/or additional flexibility
- UT-Battelle registrations
 - ISO 9001 for isotope development process
 - ISO 14001 for all UT-Battelle activities
 - OHSAS 18001 for all UT-Battelle activities
 - ISO 17025 for metrology laboratory
 - ISO 9001 for all UT-Battelle activities (2009)







Focus of Today's Presentation

- Site-wide management systems (environmental, safety, and quality)
 - These systems require participation of line organization staff
 - Individual registered processes don't necessarily require general staff awareness or participation
- Today's discussion is related to "registered" management systems but could be also applied to management systems not interested in ISO or OHSAS registration
- Support management systems need to continually focus on adding value and improving efficiency
 - Integration of audits can help



Audit Overload!

 The amount of time preparing for, participating in, and responding to audits is an increasing concern of research staff

UT-Battelle hosted ~ 70 external audits in FY08

- > 700 person-days for auditors

- > 2 times this time commitment for UT-Battelle staff affected by these audits

 Several hundred internal audits documented in assessment tracking system

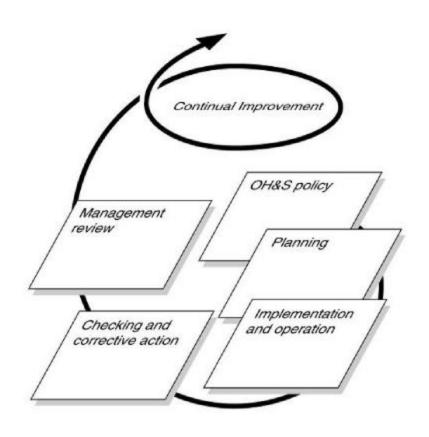
Significant resource commitment



Why Integrate Management System Audits?

Many similar elements among three standards

- Policy
- Requirements management
- Objectives
- Roles and responsibilities
- Training
- Document control
- Operational control
- Monitoring and measurement
- Nonconformity management
- Records
- Management review
- Internal audit





Standards Require Internal and **External Management System Audits**

- ISO 14001 "The organization shall ensure that internal audits of the environmental management system are conducted at planned intervals..."
- OHSAS 18001 "The organization shall ensure that internal audits of the OH&S management system are conducted at planned intervals..."
- ISO 9001 "The organization shall conduct internal audits at planned intervals to determine whether the quality management system conforms...."
- External audits required to maintain registration



Benefits of Integrating Management System Audits

- Reduce impact on line organizations
 - Integrated audits can result in less audit-days



- Cost savings
 - External management system audits can often be combined which can result in 50% (or more) cost savings
- Supports further integration and improvement of ESH&Q processes
 - Encourages teaming of ESH&Q staff
 - Increased familiarity with other management systems can lead to process improvements



ORNL Experience

- First integrated internal audit in 2009
 - Used separate EMS, QMS, and WS&H auditors
 - Replaced three week-long audits with a single one week audit
 - Feedback from line organizations was very positive
- First combined ISO 14001/OHSAS 18001 external surveillance audit in 2009
 - Resulted in ~ \$25K savings in audit costs (no increase in number of auditors or audit duration)
 - Replaced two week-long audits with one week-long audit
 - Feedback from line organizations was positive
- Plan is to ultimately combine ISO 14001, OHSAS 18001, and ISO 9001 external audits

Lesson Learned/What's Next?

External audits

Ensure that registrar can support integrated audits

Internal audits

- Beneficial to have safety, quality, and environmental expertise on audit team
- General knowledge of standards important but may not allow "deep dive" necessary to fully assess system
- Cross train auditors to have working knowledge of all three management systems



Questions?



